

AMENDMENTS TO THE SPECIFICATION

Please delete the paper copy of the Sequence Listing previously submitted in the present application and replace with the Sequence Listing submitted herewith in electronic format *via* EFS-Web.

In the specification at page 1, after the section entitled "RELATED APPLICATIONS" added in the Preliminary Amendment dated September 1, 2006, please insert the following new paragraph:

SEQUENCE LISTING SUBMISSION

The Sequence Listing associated with this application is filed in electronic format *via* EFS-Web and hereby incorporated by reference into the specification in its entirety. The name of the text file containing the Sequence Listing is Sequence_Listing_13987_00021. The size of the text file is 49 KB, and the text file was created on June 30, 2008.

In the specification at page 7, line 26, please replace the paragraph which starts with "Fig. 6a+b" with the following amended paragraph:

Fig. 6a+b: Protein alignment of the ptxA protein with the MSPRP2 protein from *Medicago sativa* and other similar proteins.

A: ptxA protein, GenBank Acc.-No.: X67427 (SEQ ID NO: 20)

B: *Medicago sativa* proline-rich cell wall protein GenBank Acc.-No.:
AF028841 (SEQ ID NO: 21)

C: SEQ ID NO: 22

~~C~~ D: *Lycopersicum esculentum* proline rich protein GenBank Acc.-No.:
X57076 (SEQ ID NO: 23)

~~D~~ E: *Vitis vinifera* proline-rich protein 1 (PRP1) GenBank Acc.-No.:
AY046416 (SEQ ID NO: 24)

~~E~~ F: *Arabidopsis thaliana* protease inhibitor/seed storage/lipid transfer protein
(LTP) GenBank Acc.-No.: NM104929 (SEQ ID NO: 25)

Consensus: SEQ ID NO: 26

In the specification at page 7, line 37, please replace the paragraph which starts with “Fig. 7a+b” with the following amended paragraph:

Fig. 7a+b: Alignment of the promoter regions of ptxA gene (A, SEQ ID NO: 87) and the MSPRP2 gene from *Medicago sativa* (B, SEQ ID NO: 27), consensus: SEQ ID NO: 28.

In the specification at page 7, line 40, please replace the paragraph which starts with “Fig. 8a-c” with the following amended paragraph:

Fig. 8a-c: Alignment of the SbHRGP3 promoter variations (consensus: SEQ ID NO: 29).

In the specification at page 51, line 18, please replace the paragraph which starts with “Genomic DNA” with the following amended paragraph:

Genomic DNA from pea and soybean is extracted using the Qiagen QIAGEN nucleic acid purification column (DNAeasy DNeasy® Plant Mini Kit, (Qiagen)). The ptxA promoter region including the 5'-untranslated region (882 bp) and the SbHRGP3 promoter region including the 5'-untranslated region (1380 bp), respectively, were isolated from genomic DNA of pea (*Pisum sativum*) or soybean (*Glycine max*), respectively, using conventional PCR. Approximately 0.1 µg of digested genomic DNA was used for the regular PCR reaction (see below). The primers were designed based on the pea ptxA sequence disclosed by Bown (GeneBank accession number X67427.1) and the SbHRGP3 sequence disclosed by Ahn (GenBank Acc.-No.: U44838), respectively. One µL of the diluted digested genomic DNA was used as the DNA template in the primary PCR reaction. The reaction comprised primers primer 1 (SEQ ID NO:13) and primer 2 (SEQ ID NO:24 or 11) for amplification of the ptxA promoter, or primers primer 1 (SEQ ID NO: 5) and primer 2 (SEQ ID NO: 6 or 11) for amplification of the SbHRGP3 promoter, respectively, in a mixture containing Buffer 3 following the protocol outlined by an Expand Long PCR kit (Cat #1681-842, Roche-Boehringer Mannheim). The isolated DNA is employed as template DNA in a PCR amplification reaction using the following primers:

In the specification at page 52, line 23, please replace the paragraph which starts with “The PCR product” with the following amended paragraph:

The PCR product is applied to a 1% (w/v) agarose gel and separated at 80V. Fragments of approximately 882 base pairs in length are excised from the gel and purified with the aid of the Qiagen QIAGEN nucleic acid purification column (Gel Extraction Kit, (Qiagen, Hilden, Germany). If appropriate, the eluate of 50 µL can be evaporated. The purified DNA is digested as follows for 2 hours at 37°C:

In the specification at page 53, line 3, please replace the paragraph which starts with "PtxA promoter" with the following amended paragraph:

PtxA promoter fragment in the Topo vector (Invitrogen) is digested with *AscI* and *XbaI* at 37°C for 2h or 4°C overnight. The promoter fragment was purified from the gel (Qiagen QIAGEN kit, Qiagen) after electrophoresis and cloned into upstream of GUS reporter gene in pUC using Rapid Ligation kit (Roche). The ligation solution is transformed into *E.coli* DH5α cells (Stratagene). The GUS chimeric constructs in pUC are digested with *AscI* and *PmeI* for and cloned into a binary vector. SbHRGP3 is cloned into *XbaI* and *BglII* sites in a binary vector to generate the GUS chimeric construct.

In the specification at page 56, line 21, please replace the paragraph which starts with "Total RNA" with the following amended paragraph:

Total RNA is extracted from plant tissues using Qiagen QIAGEN RNA purification column (RNeasy® Plant Mini Kit, (Cat. No 74904, Qiagen). Quality and quantity of the RNA are determined using Molecular Probes RiboGreen Kit (Cat. No. R-11490) on the Spectra MAX Gemini. One µg of RNA is used for RT-PCR (Roche RT-PCR AMV kit, Cat. No. 1483188) in the reaction solution I under the optimized PCR program described below.

Please replace the table at page 59 of the specification with the following amended table:

Motif Name	Location (Strand)	Motif Sequence	<u>SEQ ID NO:</u>
AMYBOX2	537 (+)	TATCCAT	<u>30</u>
C8GCARGAT	571 (+/-)	CWWWWWWWWG	<u>31</u>
CAATBOX1	368 (+); 439, 525 (-)	CAAT	<u>32</u>
CARGCW8GAT	571 (+/-)	CWWWWWWWWG	<u>33</u>
CCAATBOX1	367 (+)	CCAAT	<u>34</u>
DOFCOREZM	334, 357, 382, 389, 400, 429 (+); 446, 517, 591 (-)	AAAG	<u>35</u>
EBOXBNNAPA	407, 409 (+); 407, 409 (-)	CANNTG	<u>36</u>
GATABOX	337 (+), 537 (-)	GATA	<u>37</u>
GT1CONSENSUS	424, 544 (+); 363, 518,	GRWAAW	<u>38</u>

	593 (-)		
GTGANTG10	406, 452 (-)	GTGA	<u>39</u>
GTGANTG10	479 (-)	GTGA	<u>39</u>
IBOX	535 (-)	GATAAG	<u>40</u>
IBOXCORE	536 (-)	GATAA	<u>41</u>
IBOXCORENT	534 (-)	GATAAGR	<u>42</u>
MYBST1	537 (-)	GGATA	<u>43</u>
MYCATERD1	409 (+); 407 (-)	CATGTG	<u>44</u>
MYCATRD22	407 (+); 409 (-)	CACATG	<u>45</u>
MYCCONSENSUSAT	407 (+)	CANNTG	<u>46</u>
MYCCONSENSUSAT	409 (+); 407, 409 (-)	CANNTG	<u>46</u>
POLASIG1	550 (+)	AATAAA	<u>47</u>
POLASIG2	396 (+)	AATTAAA	<u>48</u>
POLASIG3	462 (+)	AATAAT	<u>49</u>
POLLEN1LELAT52	359 (+); 595 (-)	AGAAA	<u>50</u>
PYRIMIDINEBOXOSRAMY1A	590 (+)	CC'TTTT	<u>51</u>
SEBFCONSSTPR10A	476 (+)	YTGTCWC	<u>52</u>
SEF4MOTIFGM7S	301 (+)	RTTTTTR	<u>53</u>
TAAAGSTKST1	388, 399 (+)	TAAAG	<u>54</u>
TATABOX5	549 (-)	TTATTT	<u>55</u>
TATCCAOSAMY	537 (+)	TATCCA	<u>56</u>
TATCCAYMOTIFOSRAMY3D	537 (+)	TATCCAY	<u>57</u>

Please replace the table at pages 60-61 of the specification with the following amended table:

Motif Name	Location (Strand)	Motif Sequence	SEQ ID NO:
-300ELEMENT	856 (+)	TGHAAARK	<u>58</u>
AMYBOX1	841 (-)	TAACARA	<u>59</u>
ARFAT	1166 (+)	TGTCTC	<u>60</u>
BOXIINTPATPB	966 (+)	ATAGAA	<u>61</u>
C8GCARGAT	1014 (+/-)	CWWWWWWWWG	<u>31</u>
CAATBOX1	801, 1014, 1228, 1234 (+); 996, 1212, 1258, 1274 (-)	CAAT	<u>32</u>
CARGCW8GAT	1014 (+/-)	CWWWWWWWWG	<u>33</u>
CCAATBOX1	1212 (-)	CCAAT	<u>34</u>
DOFCOREZM	852, 859, 931, 1026, 1080, 1339, 1349 (+)	AAAG	<u>35</u>
DOFCOREZM	825, 951, 1189 (-)	AAAG	<u>35</u>
GARE1OSREP1	841 (-)	TAACAGA	<u>62</u>
GATABOX	868, 915, 1283, 1311, 1324 (+)	GATA	<u>37</u>
GATABOX	1172, 1231 (-)	GATA	<u>37</u>
GT1CONSENSUS	1083, 1283, 1311, 1324, 1332 (+)	GRWAAW	<u>38</u>
GT1CONSENSUS	1104, 1131, 1149, 1238 (-)	GRWAAW	<u>38</u>
GTGANTG10	855, 989 (+); 936 (-)	GTGA	<u>39</u>
IBOXCORE	1283, 1311, 1324 (+)	GATAA	<u>41</u>
INRNTPSADB	852, 976 (-)	YTCANTYY	<u>63</u>
MARTBOX	1124 (+)	TTWTWTTWTT	<u>64</u>
MYB1LEPR	1119 (+)	GTTAGTT	<u>65</u>
MYBCORE	842 (+)	CNGTTR	<u>66</u>
MYBPLANT	1301 (+)	MACCWAMC	<u>67</u>
MYBPZM	1303 (+)	CCWACC	<u>68</u>

MYBST1	1323 (+)	GGATA	<u>43</u>
PALBOXPPC	1190 (+)	YTYMMCMAMCMMC	<u>69</u>
POLASIG1	1049, 1128 (-)	AATAAA	<u>47</u>
POLASIG2	1054 (-)	AATTAAA	<u>48</u>
POLASIG3	1015 (+); 1146 (-)	AATAAT	<u>49</u>
POLLEN1LELAT52	1082 (+); 1133 (-)	AGAAA	<u>50</u>
PYRIMIDINEBOXOSRAMY1A	930 (-)	CCTTTT	<u>51</u>
QELEMENTZMZM13	933 (+)	AGGTCA	<u>70</u>
RAV1AAT	1100, 1355 (+)	CAACA	<u>71</u>
RBCSCONSensus	1177 (+)	AATCCAA	<u>72</u>
REALPHALGLHCB21	1197 (+)	AACCAA	<u>73</u>
ROOTMOTIFTAPOX1	540, 811, 1046, 1236(+); 802, 1229, 12135(-)	ATATT	<u>74</u>
RYREPEATBNNAPA	940 (+)	CATGCA	<u>75</u>
RYREPEATGMGY2	940 (+)	CATGCAT	<u>76</u>
RYREPEATLEGUMINBOX	940 (+)	CATGCAY	<u>77</u>
SEBFCONSSTPR10A	1165 (+); 989 (-)	YTGTCWC	<u>52</u>
SEF1MOTIF	1046 (+)	ATATTTAWW	<u>78</u>
SV40COREENHAN	1189 (-)	GTGGWWHG	<u>79</u>
TAAAGSTKST1	1079, 1348 (+); 951 (-)	TAAAG	<u>54</u>
TATABOX4	1042 (-)	TATATAA	<u>80</u>
TATABOX5	1050, 1124, 1129, 1147 (+); 1085 (-)	TTATTT	<u>55</u>
TATAPVTRNALEU	1041 (+)	TTTATATA	<u>81</u>
TATCCAOSAMY	1322 (-)	TATCCA	<u>56</u>
TGTCACACMCUCUMISIN	988 (-)	TGTCACA	<u>82</u>
TRANSINITDICOTS	889 (-)	AMNAUGGC	<u>83</u>
TRANSINITMONOCOTS	889 (-)	RMNAUGGC	<u>84</u>
WBOXATNPR1	1021 (+); 1098 (-)	TTGAC	<u>85</u>
WUSATAg	845 (+)	TTAATGG	<u>86</u>